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Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

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Public Health and the Diseases of Old Age*

THE mortality picture in our country has undergone marked changes since the turn of the century. The basic shift has been in the direction of greatly increasing the importance of the diseases of later life. These changes have been brought about by two major developments: the extraordinary success achieved by medical science and public health administration in the control of the infections; and secondly, the progressive aging of the population. The indications are that these trends will continue.

The age structure of the population has changed strikingly. In 1900, only 4.1 percent of the population was 65 years or older; by 1940 the proportion had increased to 6.8 percent. It is estimated that by 1960 more than 9 percent will be in this old-age bracket and that by the end of the century the proportion will be more than 13 percent. The actual numbers involved are even more impressive. In 1900, there were about 3,000,000 people in the United States at ages 65 or over; by 1940 the number in this age group had increased to nearly 9,000,000. By 1960 their total will be 14,000,000, and by the end of the century, 21,500,000.

Parallel changes have occurred in the ranking of the leading causes of death since 1900, as indicated in the chart on page 2. Of the diseases causing death at present, the first three — heart disease, cancer, and cerebral hemorrhage—show a heavy concentration of mortality in later life, and three others—nephritis, diabetes, and arteriosclerosis — are of like nature. In three of the remaining four, namely, the external causes, pneumonia, and tuberculosis, the death rates are also highest at the older ages. Only one of the 10 leading causes of death is now concentrated in early life.

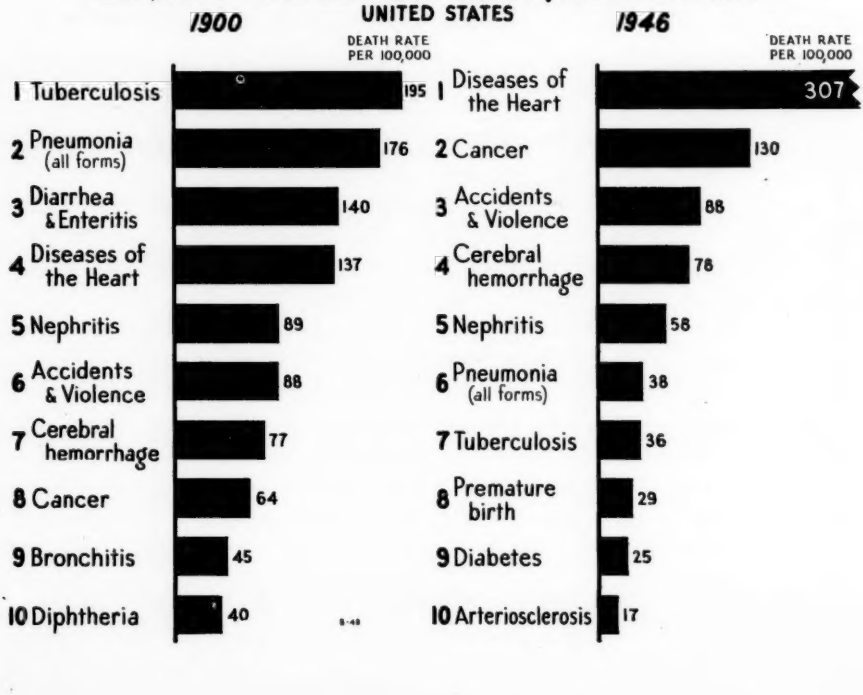
The increasing prominence of the diseases characteristic of middle and later life requires a reorientation in the viewpoint and the activities of health officers and physicians to meet the changing needs of their communities. The public health and medical professions, having largely solved the major problems of sanitation and of communicable disease control, are now ready to wrestle with the even more difficult problems

*Summary of an address by Dr. Louis I. Dublin, Second Vice-President and Statistician of the Metropolitan Life Insurance Company, presented at the Harvard School of Public Health, Saturday Morning Health Forum, April 17, 1948.

of conserving life and health in middle-aged and older people.

The cardiovascular-renal diseases, which lead as causes of death and disability at the older ages, provide a fertile field for life conservation activities. In the past, the public health movement has helped to prevent heart disease mainly as a by-product of the attack on syphilis. The future program must give greater attention to cases of degenerative origin. Much can be done to prevent heart disease among adults and to prolong the life of cardiacs through a well-planned and coordinated educational program, stressing the importance of good living habits and the dangers of overweight and overstrenuous physical activity. Insurance studies on heart disease show clearly that overweight people suffer heart damage earlier and succumb earlier than do people of average or below-average weight.

Cancer is second only to heart disease as a cause of death in our country. Under present conditions of mortality, one out of every nine white males born and one out of every seven white females born, will eventually die from cancer. About 300,000 cases of the disease are discovered each year; the actual number arising is undoubtedly much greater. The tragedy is that far too many cases are discovered at the later stages, when little can be done for the patient. There is convincing evidence that the cancer problem is



by no means an insoluble one, even in the present state of our knowledge. The American Cancer Society estimates that the current mortality from the disease can be cut by one third through the early detection and adequate treatment of cases.

Diabetes is another important disease of later life against which further progress can be made through a sound public health program. Diabetes is unique among the diseases of middle and later life in that insulin provides a specific means of control. Recent studies indicate that there may be as many as 2,000,000 diabetics in our country, nearly half of whom are unaware of their disease. The number of potential diabetics is even greater. More than 4,000,000 of the present population, or about 3 percent of the total, will eventually become diabetic.

There are a number of other common causes of sickness and death among older people which merit greater attention. These include tuberculosis, pneumonia, mental disease, nutritional diseases, and accidents. In approaching these many problems, it is essential that the efforts of the health departments, private physicians, organized medical groups, and voluntary health and safety agencies be coordinated at the local level. This should be the primary responsibility of the health officer, who is the logical leader in developing effective health services for his community.

Mortality is Up Slightly in 1948

THE mortality in the first three months of the current year was slightly above the all-time low rate recorded in the like period of last year. Among the many millions of Industrial policyholders of the Metropolitan Life Insurance Company, the death rate for the first quarter of 1948 was 7.2 per 1,000, as compared with 7.1 a year ago. Prior to 1947 the lowest rate for this part of the year had been 7.5 per 1,000, registered in 1945.

The increase in the mortality so far this year, as compared with last, has been confined largely to the older ages. Declines are in evidence for each age group up to 35 years among white males and up to 55 years among white females. The reductions at most ages have been very appreciable, ranging up to 27 percent for women at ages 20 to 24 years. The details appear in the table on page 4.

As might be expected from the improvement in mortality at the younger ages, the record for the acute conditions has been generally favorable this year. The principal communicable diseases of childhood, as a group, have recorded a new low rate, despite the fact that this is a "measles" year and illness from this disease has been widespread. The combined death rate from the four diseases—measles, scarlet fever, whooping cough, and diphtheria—

was 1.6 per 100,000 for the January to March period; for measles alone, the rate was only 0.6. At the same time, another common childhood disease, acute poliomyelitis, registered the exceedingly low death rate of one in a million policyholders.

For tuberculosis, the record so far this year is truly remarkable. The noteworthy feature of the death rate is not so much that a new minimum has been established—this has been occurring so often that it no longer occasions surprise; what is really remarkable is the rapidity with which tuberculosis is being reduced to a minor cause of death. The death rate for the first quarter of 1948, namely, 28.2 per 100,000 policyholders, is 13 percent below the rate for the same months of last year, and more than 25 percent below the average for the like part of the preceding five years, 1942 to 1946.

Other diseases to show improvement in mortality are syphilis, appendicitis, and diseases of the puerperal state. The relative decline in mortality from the puerperal causes was much greater than that in the birth rate, indicating real improvement in maternal mortality.

Although illness from influenza has been widespread, the death rate from this disease among the insured was only 3.2 per 100,000, the lowest on record for this period of the year. The rate was little more than one quarter the figure for 1946, the last "influenza" year. Pneumonia, how-

CRUDE DEATH RATES PER 100,000 FROM ALL CAUSES,* WHITE PERSONS, BY SEX AND AGE PERIODS. METROPOLITAN LIFE INSURANCE COMPANY, INDUSTRIAL PREMIUM-PAYING BUSINESS—*Weekly and Monthly Combined.*
FIRST QUARTER OF 1948, 1947, AND 1946 COMPARED

AGE PERIOD YEARS	DEATH RATES PER 100,000						PERCENT CHANGE 1948 SINCE YEAR INDICATED			
	WHITE MALES			WHITE FEMALES			WHITE MALES		WHITE FEMALES	
	1948	1947	1946	1948	1947	1946	1947	1946	1947	1946
Ages 0 to 74	744.9	719.9	793.3	574.6	567.7	625.9	+ 3.5	— 6.1	+ 1.2	— 8.2
Under 5	301.1	349.1	355.9	236.0	288.1	287.8	—13.7	—15.4	—18.1	—18.0
5 to 9	64.0	73.0	81.2	47.1	54.6	51.4	—12.3	—21.2	—13.7	— 8.4
10 to 14	52.8	59.9	67.2	35.5	38.4	49.7	—11.9	—21.4	— 7.6	—28.6
15 to 19	87.5	109.1	137.7	59.4	67.7	76.7	—19.8	—36.5	—12.3	—22.6
20 to 24	132.8	142.7	280.1	76.3	104.2	117.3	— 6.9	—52.6	—26.8	—35.0
25 to 34	158.2	195.6	257.9	123.7	140.1	165.4	—19.1	—38.7	—11.7	—25.2
35 to 44	509.4	468.8	554.6	277.6	286.7	328.5	+ 8.7	— 8.2	— 3.2	—15.5
45 to 54	1,307.1	1,256.5	1,413.9	653.2	695.4	774.3	+ 4.0	— 7.6	— 6.1	—15.6
55 to 64	2,947.5	2,804.9	2,993.2	1,683.0	1,580.3	1,742.4	+ 5.1	— 1.5	+ 6.5	— 3.4
65 to 74	6,444.5	5,874.6	6,291.9	4,510.5	4,161.9	4,673.2	+ 9.7	+ 2.4	+ 8.4	— 3.5

*Exclusive of enemy action.

NOTE—The death rates in this table differ from the rates previously published on the basis of the Weekly Premium-Paying Business alone.

ever, does show a slightly higher death rate than a year ago. The increase, amounting to 6.5 percent for the Industrial policyholders as a whole, was confined largely to the older age groups, particularly among white males.

In contrast to the favorable record made so far this year by the acute conditions, is the comparatively unfavorable showing of the chronic diseases. Cancer, diabetes, and the principal chronic cardiovascular-renal diseases, which together account for approximately three quarters of all deaths from disease, currently record mortality above that of a year ago. While the death rates from diabetes and the principal chronic cardiovascular-renal diseases did not return to the level of 1946, the rate from cancer established a new high. Within the group of cardiovascular-renal diseases, the coronary arteries registered the sharpest rise. The death rate increased to a new high of 86.7 per 100,000, as compared with 76.1 in 1947 and with 72.8 in 1946.

The external causes, like the acute diseases, have made a better showing so far this year than last. The rates from suicides and accidents are down somewhat, while the rate from homicides remains unchanged. The improvement in the death rate from accidents is accounted for largely by the decline in motor vehicle fatalities. For the January to March period, the death rate from motor vehicle accidents was 12.2 per 100,000, almost as low as the rate recorded in 1943—12.0 per 100,000—when wartime restrictions on the use of motor vehicles were in effect.

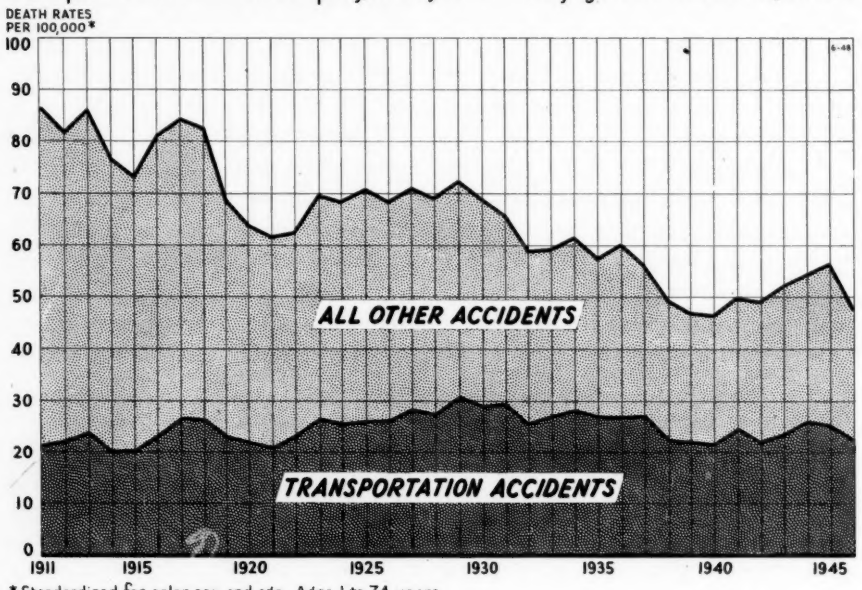
Transportation Has Become Safer

TRANSPORTATION of men and goods by land or air is costly in loss of life by operators of vehicles, transportation workers, passengers, and pedestrians. In the early years of the present century, railroad trains and engines took a heavier toll of life than any other means of transportation, while streetcars and horse-drawn vehicles added measurably to the total. At present, motor vehicles are mainly responsible for the large number of deaths in transportation accidents, while deaths in airplane accidents help to swell the toll. These marked shifts in the mortality picture reflect, in large measure, the revolutionary changes which have occurred in the mode of travel in the past few decades. The question may well be raised as to the over-all trend of mortality from land and air transportation.

Population figures are not available to answer this question, but a study of the mortality trends among the Weekly premium-paying Industrial policyholders of the Metropolitan Life Insurance Company shows that the death rate from accidents caused by land and air vehicles was only slightly higher in 1946 than it

LAND AND AIR TRANSPORTATION ACCIDENTS

Metropolitan Life Insurance Company, Weekly Premium-Paying Industrial Business, 1911-1946



* Standardized for color, sex and age. Ages 1 to 74 years

NOTE—Deaths from enemy action are not included in the figures.

had been in 1911. In 1946, the standardized death rate among these urban wage-earners and their families, ages 1 to 74 years, was 22.5 per 100,000, whereas in 1911 it had been 21.1. This slight rise should be considered in the light of the vast increase in the amount of freight hauled and the amount of traveling done by American families, particularly by automobile. On the score of the number of lives lost per million miles traveled, great progress has been made in controlling the death rate from transportation accidents.

Even in terms of mortality we have been more than holding the line since 1929. As the chart above shows, the death rate from land and air transportation accidents rose to a maximum of 30.8 per 100,000 in 1929, but thereafter the trend was generally downward until 1940, when the rate was 21.6. The war years saw a rise in the curve, due largely to the relatively high frequency of accidents among the many insured who entered the armed forces, and more particularly among those in the aviation branch of the service. However, the death rate declined in 1946 to a figure only a little higher than that in 1940.

While it is gratifying to learn that despite the vastly increased mileage, the death rate in transportation accidents has remained fairly stable, the record for this type of accident is disappointing when contrasted with the marked gains that have

been achieved in reducing the mortality from non-vehicular accidents. As the chart clearly shows, the trend of the death rate from accidents other than those involving land or air transportation vehicles, has been fairly steadily downward over the 35 years, the rate falling from 65.5 per 100,000 in 1911 to 24.9 in 1946. The chart brings out, too, the extent to which these transportation fatalities have increased in relation to the total mortality from accidents. Whereas in 1911 transportation accidents accounted for less than a fourth of all the accidental deaths among these insured, in 1946 they comprised nearly half the total.

Males have fared somewhat better than females in this insurance experience. Among white males, for example, the death rate from land and air transportation accidents was 39.1 per 100,000 in 1946 as compared with 39.7 in 1911. Among white females, however, the rate rose from 4.5 to 7.7 per 100,000 in the same period. The relatively unfavorable record for females results from the fact that the death toll from automobile accidents for females, as well as for males, is far higher now than 35 years ago, but

LAND AND AIR TRANSPORTATION, BY TYPE

AVERAGES OF ANNUAL DEATH RATES* PER 100,000. TOTAL PERSONS, AGES 1 TO 74 YEARS. METROPOLITAN LIFE INSURANCE COMPANY, WEEKLY PREMIUM-PAYING INDUSTRIAL BUSINESS, 1911 TO 1946

TYPE OF ACCIDENT	DEATH RATES PER 100,000								PERCENT CHANGE 1946 SINCE 1911–1915
	1946	1941–1945	1936–1940	1931–1935	1926–1930	1921–1925	1916–1920	1911–1915	
Accidental and unspecified violence—TOTAL	47.4	52.4	51.9	60.6	69.9	66.6	76.1	80.8	— 41
Accidental and unspecified violence—excluding land and air transportation	24.9	28.1	27.9	33.2	41.5	42.3	52.0	59.5	— 58
Land and air transportation accidents	22.5	24.3	23.9	27.4	28.4	24.3	24.0	21.3	+ 6
Railroad accidents	2.0	2.5	2.5	3.1	4.6	4.9	8.2	10.0	— 80
Streetcar accidents	.5	.5	.6	.9	1.5	2.0	2.9	3.6	— 86
Automobile accidents	16.0	15.6	19.9	22.3	21.1	15.7	10.2	4.1	+290
Accidental traumatism by other vehicles	4.0	5.8	.9	1.0	1.2	1.7	2.7	3.5	+ 14

*Standardized for color, sex, and age.

NOTE—Deaths from enemy action are not included in the figures.

Deaths in collisions between motor vehicles and railroad trains or streetcars are included with the totals for the heavier vehicles.

there has been no substantial compensating decline for females in other types of transportation accidents as there has been for males. Moreover, white males have recorded an improvement at every age period under 75 years except at ages 1 to 4 and 15 to 24, whereas among white females there was an increase in death rate at all ages except 45 to 64.

Radical changes have taken place since 1911 in the relative importance of the several modes of transportation as means of fatal injuries. In 1946, and for many years prior, automobile accidents accounted for the bulk of the deaths. From the table it will be seen that automobile accidents were responsible for more than 70 percent of the mortality from land and air transportation mishaps. In the years 1911-1915, the proportion averaged less than 20 percent. The relative contribution of the automobile, it should be pointed out, would be even greater but for the fact that deaths arising from collisions between automobiles and railroad trains or streetcars were charged to the heavier vehicle in order to preserve comparability of the data over the years. In 1946, the standardized death rate from automobile accidents at ages 1 to 74 years was 16.0 per 100,000, which compares with an average rate of 4.1 per 100,000 in the period 1911-1915. The situation was even more serious up until the late 1930's. The maximum death rate, 24.1 per 100,000, was recorded in 1931.

A particularly bright spot in the record is the sharp downward trend in fatalities due to railroad accidents. In the early years of this insurance experience, 1911-1915, the death rate from this means was 10 per 100,000; in 1946 it was only 2.0. In large measure this marked achievement in life conservation resulted from the organized safety activities of the railroads. The mortality from accidents involving streetcars has become a negligible item, due largely to the falling-off in the use of these vehicles.

The decline in the death rate from "other vehicular accidents" up to 1940 reflects a gradual reduction in fatal injuries from horse-drawn vehicles. The sharp rise in the war years resulted from an increase in military aviation deaths (exclusive of those due to enemy action).

Each year since the end of the war, not far from 40,000 persons in the general population of the United States have been killed in land and air transportation accidents. One major objective of the safety movement is to cut down this total.

Birth Rate in 1947 Highest in a Generation

THE birth rate in the United States has displayed marked recuperative power since 1933, when it reached the lowest point in our history. From the minimum of 16.6 per 1,000 population in 1933, the recorded birth rate rose 56 percent to 25.9 per 1,000 in 1947, the highest in a generation. The actual figure for last year, including unreported

births, was 27.1 per 1,000. This increase may be attributed largely to the favorable economic conditions and to the special psychological factors engendered by the war. In the prewar years, that is, from 1933 to 1940 the birth rate in the United States increased only 8 percent.

RECORDED BIRTHS PER 1,000 POPULATION, BY STATE OF OCCURRENCE.* 1947, 1940, AND 1933

GEOGRAPHIC REGION AND STATE	BIRTH RATE			PERCENT INCREASE 1947 SINCE	
	1947	1940	1933	1940	1933
UNITED STATES	25.9	17.9	16.6	45	56
New England	24.4	15.7	15.1	55	62
Maine	26.3	17.9	18.4	47	43
New Hampshire	25.6	17.2	15.5	49	65
Vermont	25.9	18.6	17.2	39	51
Massachusetts	24.7	15.3	14.8	61	67
Rhode Island	24.5	15.1	15.3	62	60
Connecticut	22.1	14.7	13.7	50	61
Middle Atlantic	23.7	15.3	14.8	55	60
New York	23.1	14.6	14.3	58	62
New Jersey	23.5	14.1	13.7	67	72
Pennsylvania	24.6	16.7	16.1	47	53
East North Central	24.8	17.0	15.0	46	65
Ohio	24.6	16.6	14.2	48	73
Indiana	25.0	18.0	15.3	39	63
Illinois	23.9	15.6	13.9	53	72
Michigan	25.7	18.8	16.9	37	52
Wisconsin	25.6	17.4	16.6	47	54
West North Central	25.3	17.5	16.4	45	54
Minnesota	26.4	19.0	16.7	39	58
Iowa	25.3	17.9	15.9	41	59
Missouri	24.2	16.4	15.2	48	59
North Dakota	31.6	20.8	19.6	52	61
South Dakota	29.5	18.1	18.6	63	59
Nebraska	24.8	16.9	17.5	47	42
Kansas	23.3	16.0	16.4	46	42
South Atlantic	29.2	20.7	20.4	41	43
Delaware	26.3	17.2	15.8	53	66
Maryland	25.1	16.6	16.2	51	55
District of Columbia	34.4	22.3	18.8	54	83
South Atlantic (*Continued*)					
Virginia	27.9	20.5	20.8	36	34
West Virginia	30.0	22.1	20.7	36	45
North Carolina	31.0	22.5	23.1	38	34
South Carolina	32.8	23.2	23.0	41	43
Georgia	29.8	20.8	20.7	43	44
Florida	25.7	17.7	16.5	45	56
East South Central	30.3	21.7	20.6	40	47
Kentucky	29.2	22.3	20.5	31	42
Tennessee	29.2	19.1	18.3	53	60
Alabama	31.1	22.1	22.3	41	39
Mississippi	32.3	24.0	21.8	35	48
West South Central	27.2	19.9	18.3	37	49
Arkansas	26.4	19.6	19.3	35	37
Louisiana	29.3	21.5	18.3	36	60
Oklahoma	23.2	19.1	18.3	21	27
Texas	27.9	19.7	17.9	42	56
Mountain	31.3	22.0	19.1	42	64
Montana	30.3	20.6	16.5	47	84
Idaho	32.7	22.2	18.4	47	78
Wyoming	26.6	20.3	18.3	31	45
Colorado	29.1	18.8	16.0	55	82
New Mexico	37.8	27.6	27.4	37	38
Arizona	30.3	23.4	19.1	29	59
Utah	32.8	24.5	22.9	34	43
Nevada	30.6	18.8	14.1	63	117
Pacific	25.4	16.1	12.7	58	100
Washington	26.9	16.2	13.1	66	105
Oregon	24.1	16.3	12.5	48	93
California	25.2	16.1	12.6	57	100

*These rates are based on births by place of occurrence, inasmuch as data according to place of residence are not available for 1933 or for 1947. However, except for Nevada and the District of Columbia, each of which gains a relatively large proportion of its total recorded births from the residents of neighboring areas, the rates compiled by place of occurrence are accurate indications of the relative fertility in the various States.

NOTE—Rates for 1947 are provisional.

Source—Rates for 1933 and 1940 computed by the Statistical Bureau, Metropolitan Life Insurance Company from the number of births reported by the Bureau of the Census; rates for 1947, from the National Office of Vital Statistics, except those for Massachusetts, Connecticut, and New England as a whole, which were estimated.

whereas from 1940 to 1947 it rose 45 percent.

The relative rise in the birth rate from 1933 to 1947 was by no means uniform throughout the country, as may be seen from the table on page 9. In general, the States with the lowest birth rates in 1933 made the greatest gains. For example, the ten States with rates under 15 per 1,000 in 1933, widely separated geographically, each recorded a relative increase of more than 60 percent. On the other hand, the ten States in which the rate was above 20 per 1,000 in 1933, each registered a gain of less than 50 percent. A similar inverse relationship is observed for the broad geographic divisions of the country. The highly industrialized areas of the North East, with their traditionally low birth rates, experienced better than average rises from 1933 to 1947. The East North Central States recorded an increase of 65 percent, the New England States 62 percent, and the Middle Atlantic States 60 percent. At the other end of the list are the Southern regions, with the South Atlantic division showing the smallest increase of all, 43 percent.

Especially noteworthy are the developments in the Western part of our country. The Pacific Coast States lead all other regions with respect to the relative increase in the birth rate between 1933 and 1947. The rate there doubled, jumping from 12.7 per 1,000 to 25.4. As a consequence of the rise in the birth rate as well as the record migration into this area, the Pacific Coast States have been contributing an increasing proportion of all the births in the country. In 1933, these States contributed 5.2 percent of the births in the United States; by 1947 the proportion had increased to 9.2 percent. The Mountain States, adjacent to the Pacific area, likewise experienced a large increase in the birth rate (64 percent), although it had a relatively high rate even in 1933, namely, 19.1 per 1,000. As a result of these factors, the Mountain States had a higher recorded birth rate than any other geographic division in 1947, whereas in 1933 this group of States ranked below both the East South Central and the South Atlantic divisions.

What is the outlook for births in 1948? From preliminary data now available, it is clear that the number of babies born this year will not reach 1947's record-breaking total of 3,910,000. Provisional figures for the first two months of the current year, issued by the National Office of Vital Statistics, show a decrease of 12 percent from the corresponding figure of last year. It is important to note, however, that the number of births for January and February is still about one third above the total for the like months of 1946. The prospects, therefore, are that 1948 will show the second highest number of births in our history. A questionnaire survey of 19 large cities throughout the country for the first quarter of the year, conducted by the Statistical Bureau of the Metropolitan Life Insurance Company, confirms this conclusion.

CRUDE DEATH RATES* PER 100,000 POLICYHOLDERS FROM SELECTED CAUSES
INDUSTRIAL PREMIUM-PAYING BUSINESS—*Weekly and Monthly Combined.*
METROPOLITAN LIFE INSURANCE COMPANY

MARCH 1948

CAUSE OF DEATH	ANNUAL RATE PER 100,000 POLICYHOLDERS*				
	March 1948	March 1947	YEAR TO DATE: END OF MARCH		
			1948	1947	1946
ALL CAUSES—TOTAL	744.3	736.6	722.8	709.6	816.0
—Excluding war deaths	*744.0*	*735.6*	*722.6*	*708.7*	*787.7*
Typhoid fever	—	0.2	0.1	0.2	0.1
Measles	1.0	.3	.6	.3	.4
Scarlet fever	.2	.1	.1	.1	.2
Whooping cough	.4	.8	.5	.7	.9
Diphtheria	.5	.8	.4	.8	.9
Influenza	2.5	4.0	3.2	3.6	11.2
Pneumonia (all forms)	31.6	30.3	31.1	29.2	38.8
Tuberculosis (all forms)	28.2	36.5	28.2	32.5	37.9
Tuberculosis of respiratory system	25.9	33.0	25.7	29.5	34.6
Syphilis	7.1	7.6	7.2	7.9	8.2
Acute poliomyelitis	.1	.4	.1	.5	.2
Cancer (all forms)	114.3	108.0	112.9	109.8	109.7
Diabetes mellitus	25.8	24.3	25.6	24.0	30.2
Principal chronic cardiovascular-renal diseases	359.9	347.1	355.5	337.7	364.7
Cerebral hemorrhage	67.4	66.4	66.3	65.0	68.7
Diseases of the coronary arteries and angina pectoris	86.0	77.1	86.7	76.1	72.8
Other chronic heart diseases†	167.8	161.0	164.6	156.9	178.4
Chronic nephritis	38.7	42.6	37.9	39.7	44.8
Diarrhea and enteritis	3.4	3.6	3.5	3.4	2.8
Appendicitis	2.8	2.2	2.4	2.8	3.8
Puerperal state—total	2.3	3.3	2.4	3.2	3.1
Suicides	6.4	6.1	6.4	6.6	7.6
Homicides	3.0	2.7	3.0	3.0	3.6
Accidents—total	41.3	40.0	38.6	40.7	50.7
Home accidents	12.6	10.0	12.0	11.7	13.2
Occupational accidents	4.0	4.6	4.3	4.5	4.6
Motor vehicle accidents	11.4	12.8	12.2	14.7	16.1
War deaths (enemy action)	.3	1.0	.2	.9	28.3
All other causes of death	113.3	117.3	100.8	101.8	112.6

*The rates for 1948 and 1947 are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

†International List (1940) titles 92, 93 (c), (d), (e), and 95.

NOTE—The death rates in this table differ from the rates previously published on the basis of the Weekly Premium-Paying Business alone.

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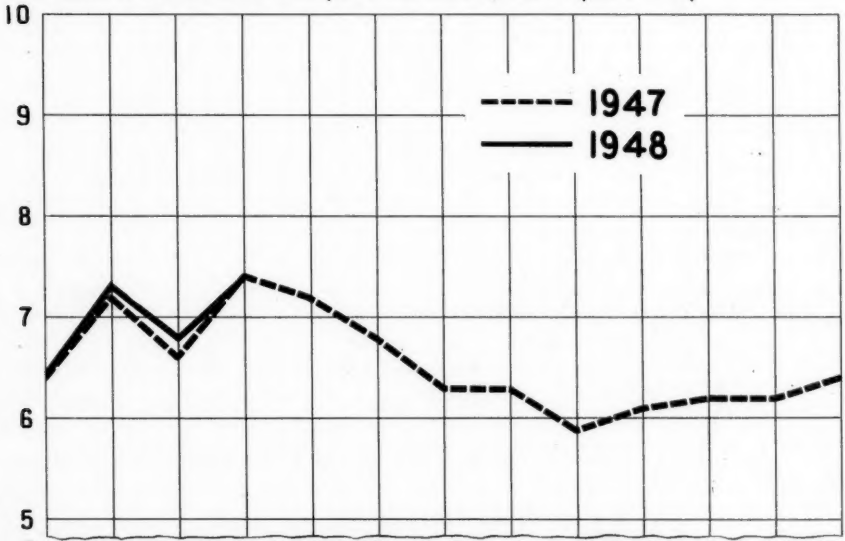
MORTALITY FROM ALL CAUSES

METROPOLITAN LIFE INSURANCE COMPANY • INDUSTRIAL PREMIUM-PAYING BUSINESS
WEEKLY AND MONTHLY COMBINED

DEATH RATES PER 1,000 ANNUAL BASIS (*1947 and 1948 figures are provisional*)



(DEC)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1947	7.2	6.6	7.4	7.2	6.8	6.3	6.3	5.9	6.1	6.2	6.2	6.4
1948	7.3	6.8	7.4									

NOTE—The death rates in this chart differ from the rates previously published on the basis of the Weekly Premium-Paying Business alone.

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